

# Stronger Housing, Safer Communities

## Community Profile East Palo Alto

### Key Issues

The East Palo Alto Community Profile Area is a mixture of single-family detached homes and multifamily buildings. Although the majority of single family homes appear to have been built after 1940, and not using cripple wall construction, multifamily homes appear to be 1950's to 1970's era concrete buildings that may have a weak story or open front or may be non-ductile concrete. Most of the existing housing is less than 10 stories and is therefore unlikely to have a foundation that can withstand liquefaction. This poses a particular risk in the portion of the city that where soils are highly susceptible to liquefaction. Approximately one-quarter of the city is within the current 100-year flood plain, and these low-lying areas are also susceptible to future flooding as sea level rises. In general, those that live in East Palo Alto are resource constrained, with many very low income, housing and transportation cost burdened households. The western portions of the city has a higher than average number transit dependent households, many of which are renters. The city is ethnically diverse with at least half of the block groups having a high percentage of non-English speaking households. This combination of characteristics suggests that the established community in has limited ability or resources to invest in improving the housing they live in, and will either need to shelter in place or rely on public transportation to evacuate. These characteristics also mean that residents are more likely to be displaced if their homes are damaged, and may struggle to find affordable housing elsewhere.

### Description of the Profile Area

The Community Profile Area includes the entire 2.6 square mile City of East Palo Alto, which has a reported population of 28,155 individuals and 6,940 households (East Palo Alto General Plan Update, February 2014). The 1999 General Plan identified twelve neighborhoods in the city: University Village, Kavanaugh,



Ravenswood Industrial, Palo Alto Park, University/Bay Corridor, Weeks, Baylands, Gateway, Gateway III/Gardens, Willow, University Circle, and Woodland. Single family residential is the most common land use (41%) in the city, and although there are some job-providing land uses they make up a small percentage of total land use (11%). There are very few areas of mixed land use in the city, and commercial and office uses are concentrated north of Highway 101 and east of University Avenue. While there are public parks, schools and churches in the residential areas there is a lack of local goods and services providers in these neighborhoods. Over 20% of city lands are some form of natural community or habitat, including northern coastal salt marsh, non-tidal/diked salt marsh, brackish marsh, freshwater marsh, open water, non-native grasslands, and riparian woodlands. Most of these habitats are protected and located near the Bay shoreline and along San Francisquito Creek. Significant transportation infrastructure includes Highway 101 (Bayshore Freeway), State Route 109 (University Avenue), State Route 114 (Willow Road), and State Route 84 (Dumbarton Bridge/Bayfront Expressway). Transit serving East Palo Alto includes five SamTrans routes (Routes 280, 281, 296, 297, and 397) and two AC Transit Dumbarton Express Routes that connect San Francisco and the

East Bay.

There are very few large developable parcels in East Palo Alto and most future growth is likely to occur across the city rather than as large, single-owner projects. The exception is the Ravenswood and 4 Corners areas which have been identified as an important location for new growth even though it needs significant infrastructure upgrades to support additional housing or commercial development. The Ravenswood / 4 Corners TOD Specific Plan (February 2013). The Specific Plan envisions up to 5,000 jobs, 1.6 million square feet of office, R&D, industrial, and retail development, 835 residential units, 30 acres of parks, and 4.5 miles of trails in the 350 acre area plan area which is currently industrial and residential land uses along the eastern edge of the city.

## Hazards

Due to the proximity to the Hayward Fault, East Palo Alto could be subject to ground shaking of MMI XIII<sup>1</sup> or higher from either a Hayward or San Andreas event. In addition, half of the city is located where soils are highly susceptible to liquefaction, while the other half where soils are moderately susceptible. Based on the soil susceptibility and the proximity to the Hayward Fault, most of the city is likely to be shaken long and hard enough to cause liquefaction. There are a number of secondary hazards that could follow a seismic event including fire or flooding due to pipe breakage. In addition, levees that protect the city could be damaged, causing flooding of currently protected inland areas. More information is needed to better understand secondary hazards, including pipe location and condition, prevalence of gas shutoff valves, and status of any dams and levees. Approximately one-quarter of the city is located within a FEMA identified Special Flood Hazard Area (SFHA) and is at risk of flooding during a 100-year storm event. Many city streets do not have storm drains, and those that do have a limited capacity to handle runoff during heavy rains. During past storm events this has caused overflows and street flooding, and in the case of a storm in 1998, isolation

and stranding of various parts of the city. As sea levels rise the capacity of the stormwater system to collect, convey and discharge rainfall runoff will diminish due to higher high tides as well as rising groundwater levels. In addition, parts of the city that are not currently at risk of flooding may begin to flood and areas that currently flood may see more frequent, longer duration, and more extensive flooding.

## Existing housing characteristics

Over half of the city's housing is single family detached homes and over a third is multifamily buildings with 5 units or more (East Palo Alto General Plan Update, February 2014). In addition, a small number (7%) of housing units are mobile homes, which are highly vulnerable to both earthquakes and flooding. The majority of single family homes appear to have been built after 1940 and are not cripple wall construction. Existing multifamily homes are concentrated in the neighborhood to the west and south of the Bayshore freeway, and appear to be 1950's to 1970's era concrete buildings some with parking on the first floor. The project's regional analysis found that block groups in this part of the city have a triggering level (30% or more) of housing that may have a weak story or open front, or may be non-ductile concrete. The regional analysis also found that all block groups in the city have a triggering level (30% or more) of housing likely to have a foundation insufficient to withstand liquefaction (<10 stories), and that three block groups along the bay shoreline had a triggering level (30% or more) of housing within the current FEMA SFHA. Although there are currently no repetitive flood loss properties in the city, the status of flood insurance for homes within the SFHA is unknown, and most existing housing is highly vulnerable to flooding.

## Community characteristics

City-wide over half of all housing units (57%) are renters occupied, which is higher than the county average of 41% (City of East Palo Alto General Plan Update, February 2014). The project's regional analysis found that one block group in the center of the city (south of Bay Street, west of Pulgas Avenue and east of University Avenue) and all of the block groups to the south and west of the Bayshore Freeway have a high percentage of renters as compared to the regional block group average. Based on U.S. Census estimates, of the 4,000 renter-occupied units in East Palo Alto,

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<sup>1</sup> The Modified Mercalli Intensity (MMI) scale depicts shaking severity. MMI VIII is very strong shaking that can cause extensive damage to unreinforced masonry buildings, including partial collapse; fall of some masonry walls; twisting, falling of chimneys and monuments; wood-frame houses move on foundations if not bolted; loose partition walls thrown out (<http://quake.abag.ca.gov/shaking/mmi/>).



1,300 are single-family, almost 2,700 are multi-family, and nearly 2,300 are controlled by the City's Rent Stabilization Ordinance. City-wide, nearly one-fifth of all households are shared with relatives and there is an average household size of slightly over 4 persons, which in comparison to the county-wide average of 2.75 suggests some level of overcrowding.

The project's regional analysis found that for all but four block groups in the city greater than 30% of households are very low income (earning less than 50% of area median income) and that all block groups in the city have a high percentage of non-high school graduates as compared to the regional block group average. All block groups in the city are housing cost burdened (greater than 15% of all households spend 50% or more of their income on housing) and all but four block groups are also transportation cost burdened (greater than 15% of all households spend 5% or more of their income on transportation).

City-wide, 9% of households do not own a car, and the regional analysis found that there is a cluster of block groups in the northwest corner of the city where this rate is higher (10% or more households do not own a car). More zero vehicle households are renter occupied than owner occupied, and while there is a high rate of transit dependence in the city there is a low rate of transit use as service is infrequent and travel times are long.

Overall, the city-wide age distribution is skewed toward youth with 19 years olds or younger representing 35% of the population. There are very few seniors in East Palo Alto, with only 5.9% of the population over 65 years old. The regional analysis found that no block groups had greater than 10% of the population over 75 years old, and only one block group (west of the Bayshore Freeway between Euclid and University Avenues) had a high percentage of children under 5 years old (as compared to the regional block group average).

City-wide, 64% of residents self-identify as Hispanic or Latino (85% of which are of Mexican origin) and 16% as black alone. Hispanic and Latino populations are concentrated in the northwestern portion of the city, African American are more likely to live in the eastern portion of the city, and Asian/Pacific Islanders in the southern neighborhoods. Additionally, over a third of

residents do not have U.S. citizenship which can pose particular problems during and after natural disasters as access to resources tends to be more limited for non-Citizens and the level of trust in government institutions tends to be low. In addition, over half of the city's block groups, generally in the western portion of the city, have 20% or more non-English speaking households. City-wide non-English speaking households has increased from 19% in 2000 to 25% in 2010.

City-wide, 7% of residents have a reported disability (as defined by the U.S. Census as a long lasting physical, mental, or emotional condition) that can result in mobility challenges and unique housing needs. Although most disabled residents live with a parent or guardian, many (40%) are over 65 years. In addition, East Palo Alto is defined as a Medically Underserved Area, meaning city residents lack access to health care services. For example, there are no hospitals currently in East Palo Alto, and residents have to go to nearby hospitals in Menlo Park and Palo Alto.

## **Community Serving Facilities**

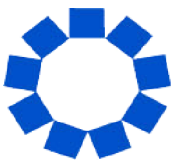
Community services in East Palo Alto include a fire station (Menlo Park Fire District Station 2) and the city Police Department. Although less than 6% of East Palo Alto residents are over 65 years old, there are two senior centers (owned by the city but managed by the East Palo Alto Senior Center, Inc., a non-profit organization), three assisted living facilities, and one retirement community. Disaster preparedness classes and a CERT program is provided to city residents by San Mateo County, and the city is served by the Lewis and Joan Platt East Palo Alto Family YMCA.

Community facilities or public spaces that could serve as gathering locations or sources of emergency information or assistance include the seven schools that are part of the Ravenswood City School District serving East Palo Alto and eastern Menlo Park, at least ten places of worship, five parks and one nature preserve (a total of 28 acres of public parkland). There are no parks, however, on the Westside where there is high demand due to the number of young families living in multi-family housing.

Image credit: "East Palo Alto PA Airport Moffett Field P1190059" by David.Monniaux



# BAY AREA HOUSING AND COMMUNITY MULTIPLE HAZARD RISK ASSESSMENT



**LEGEND**

- Community Profile Boundary
- Open Space
- Specific Plan Boundary  
*Ravenswood 4 Corners TOD Specific Plan*
- PDA Boundary  
*Ravenswood PDA*

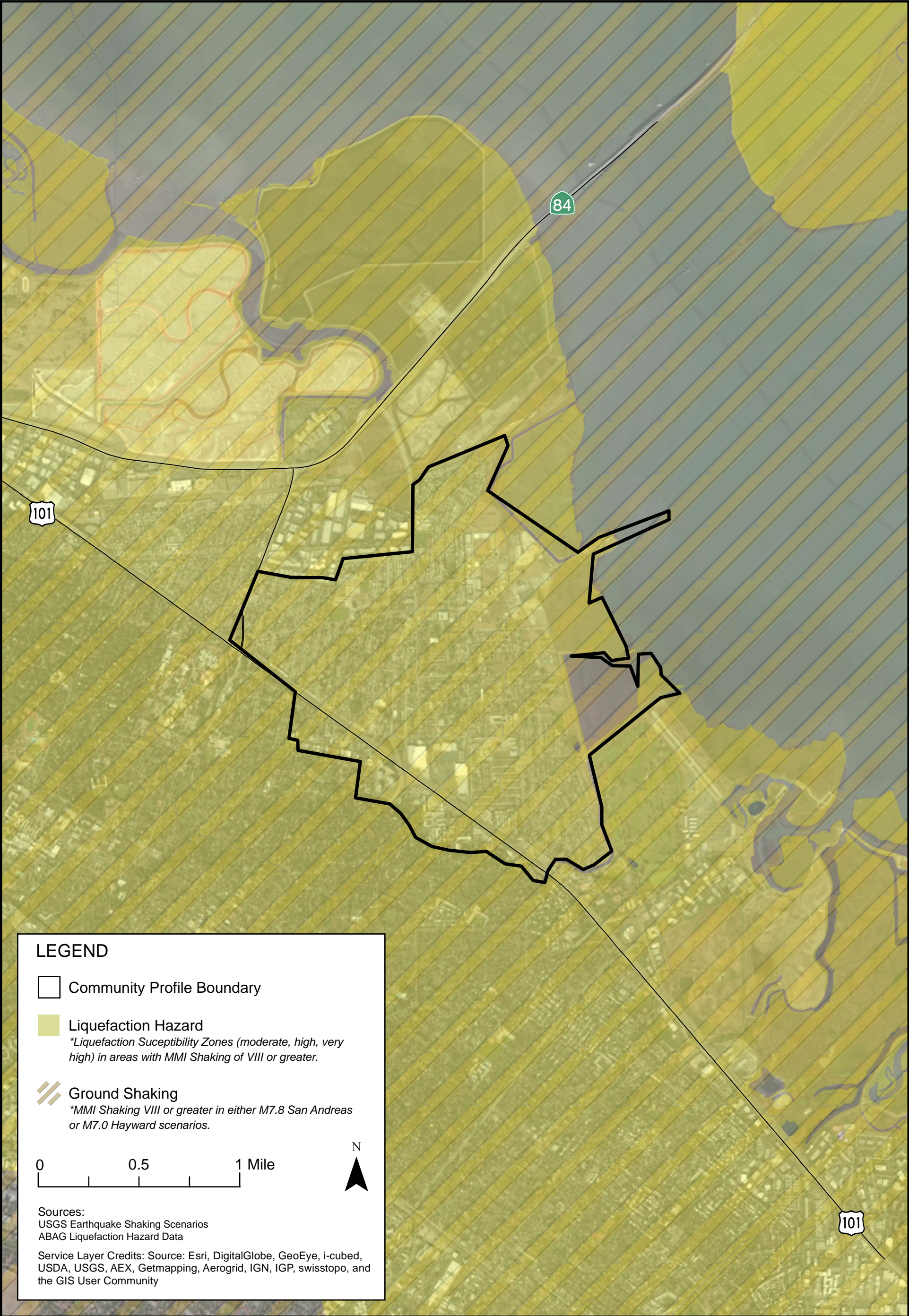
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Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

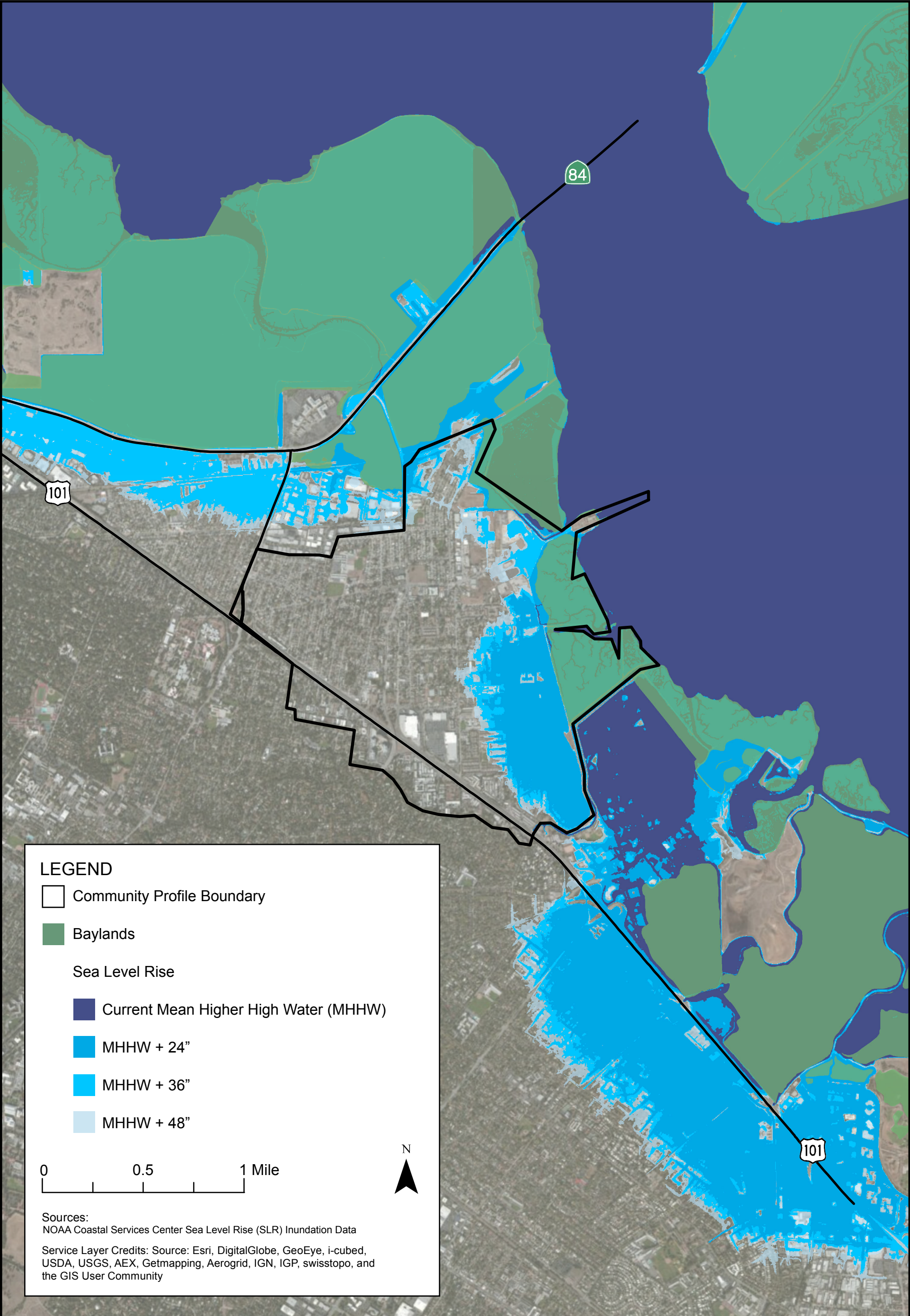
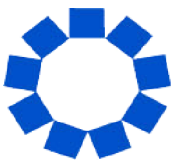


# BAY AREA HOUSING AND COMMUNITY MULTIPLE HAZARD RISK ASSESSMENT



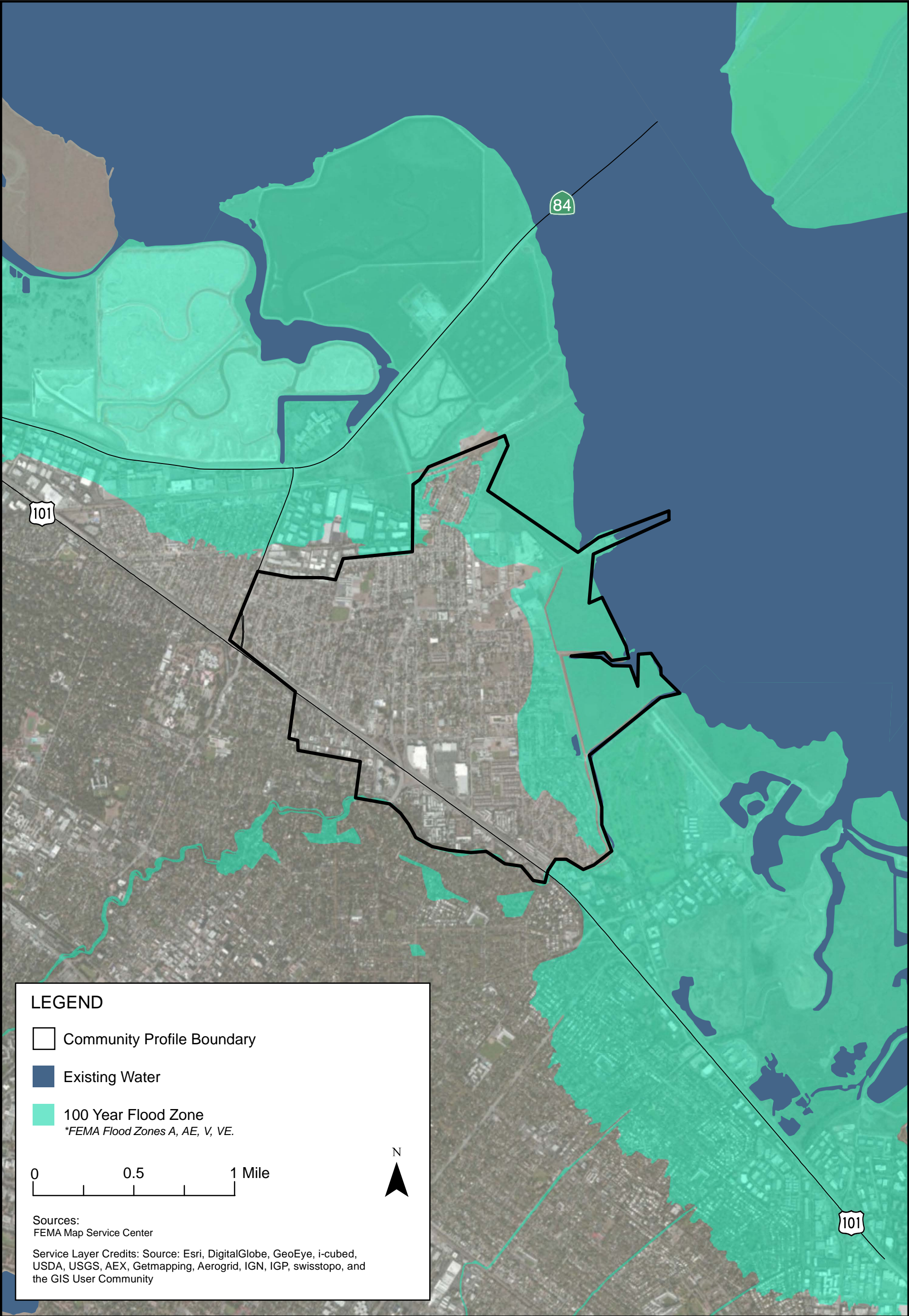


# BAY AREA HOUSING AND COMMUNITY MULTIPLE HAZARD RISK ASSESSMENT





# BAY AREA HOUSING AND COMMUNITY MULTIPLE HAZARD RISK ASSESSMENT



LEGEND

- Community Profile Boundary
- Existing Water
- 100 Year Flood Zone  
*\*FEMA Flood Zones A, AE, V, VE.*

0 0.5 1 Mile

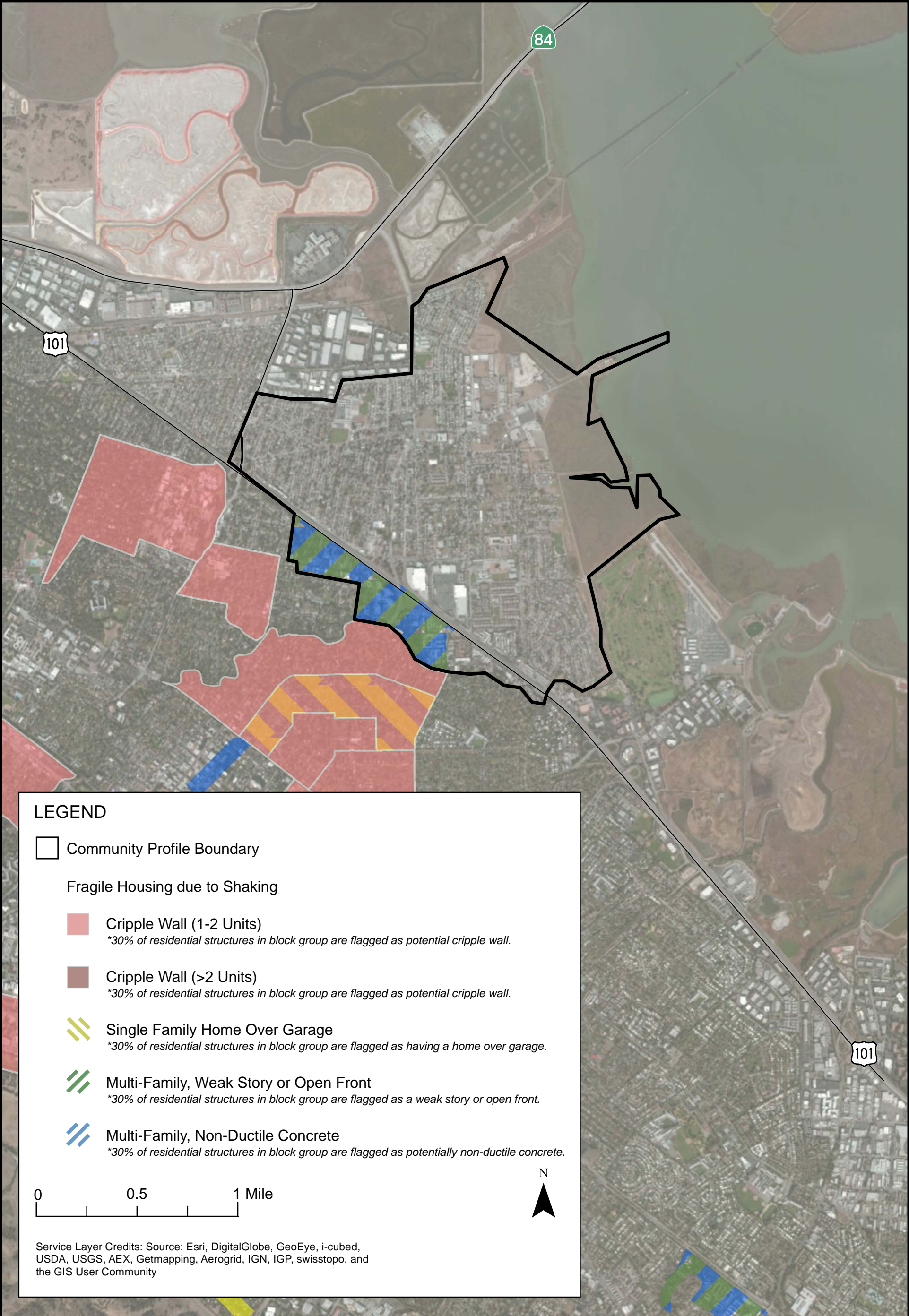


Sources:  
FEMA Map Service Center

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# BAY AREA HOUSING AND COMMUNITY MULTIPLE HAZARD RISK ASSESSMENT



LEGEND

Community Profile Boundary

Fragile Housing due to Shaking

Cripple Wall (1-2 Units)  
*\*30% of residential structures in block group are flagged as potential cripple wall.*

Cripple Wall (>2 Units)  
*\*30% of residential structures in block group are flagged as potential cripple wall.*

Single Family Home Over Garage  
*\*30% of residential structures in block group are flagged as having a home over garage.*

Multi-Family, Weak Story or Open Front  
*\*30% of residential structures in block group are flagged as a weak story or open front.*

Multi-Family, Non-Ductile Concrete  
*\*30% of residential structures in block group are flagged as potentially non-ductile concrete.*

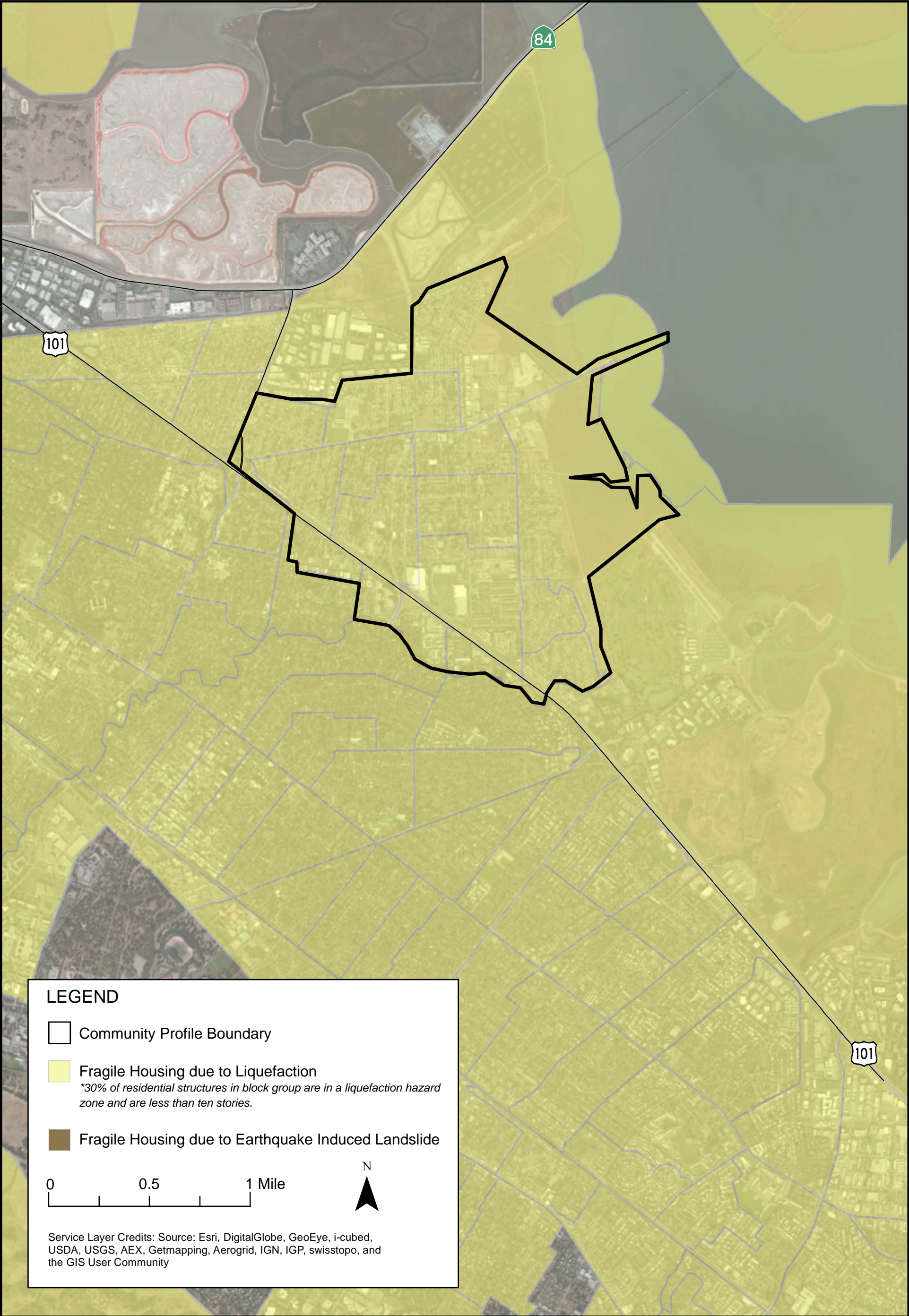
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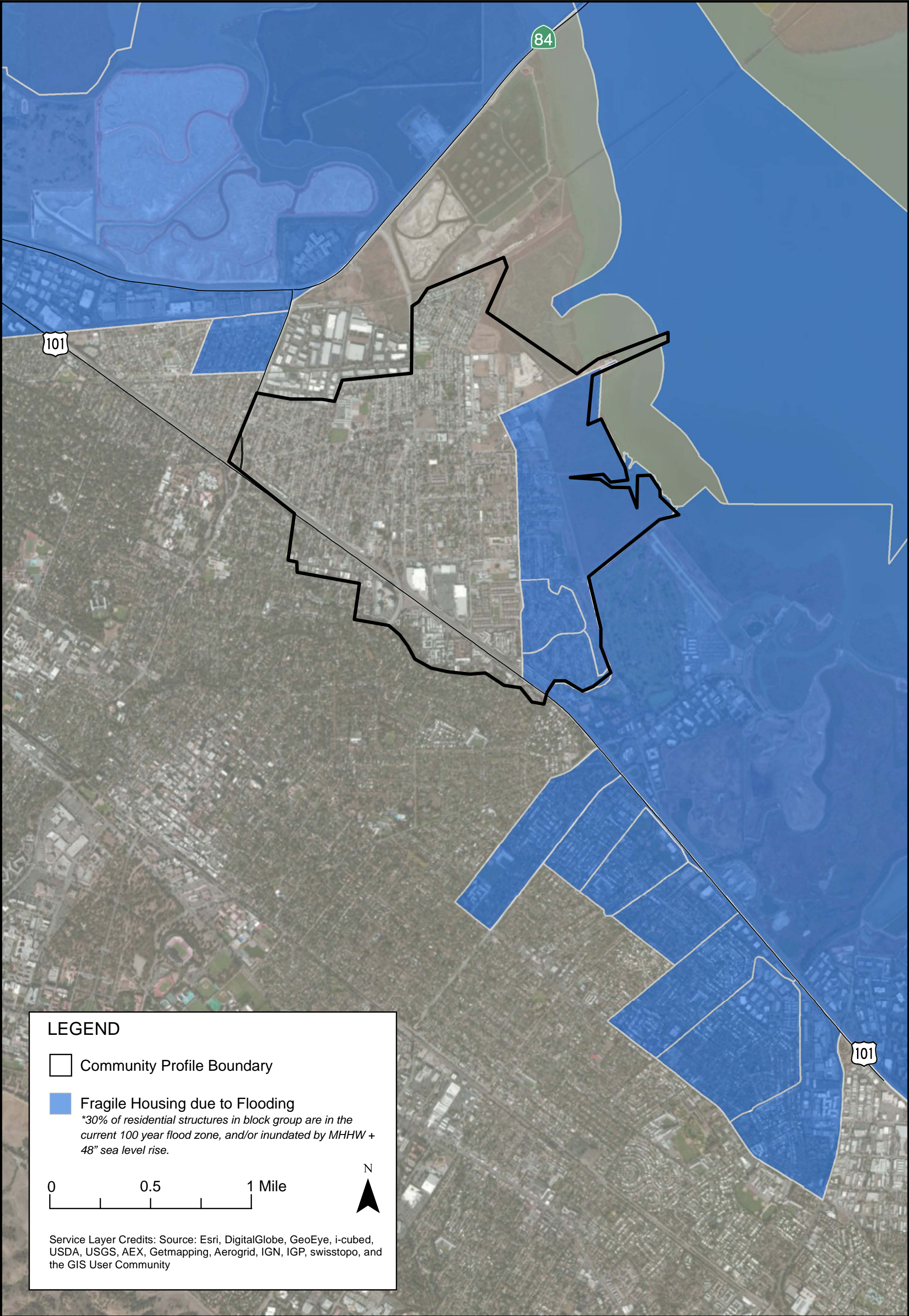


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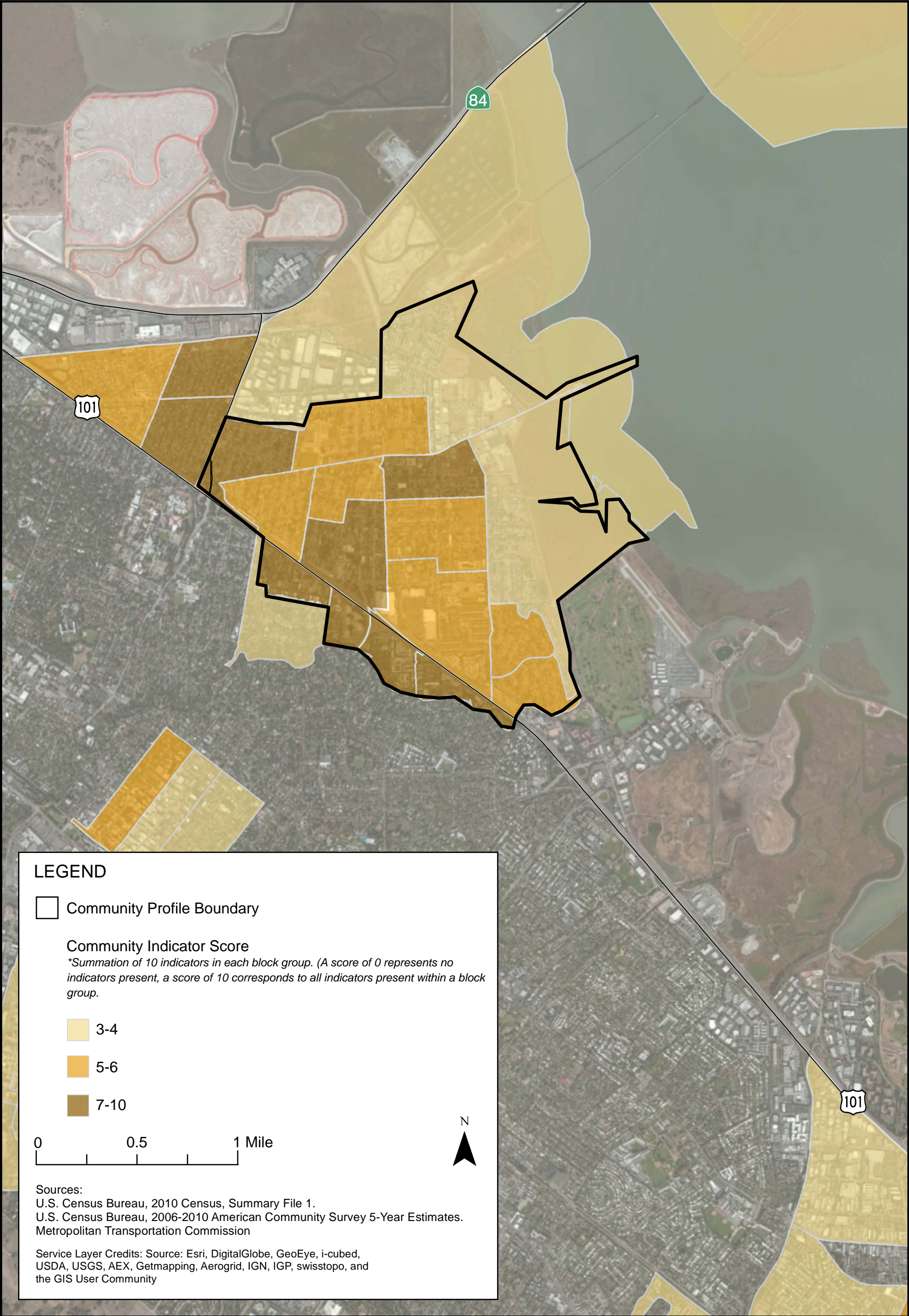


# BAY AREA HOUSING AND COMMUNITY MULTIPLE HAZARD RISK ASSESSMENT





# BAY AREA HOUSING AND COMMUNITY MULTIPLE HAZARD RISK ASSESSMENT



**LEGEND**

Community Profile Boundary

**Community Indicator Score**

*\*Summation of 10 indicators in each block group. (A score of 0 represents no indicators present, a score of 10 corresponds to all indicators present within a block group.)*

3-4

5-6

7-10

0 0.5 1 Mile



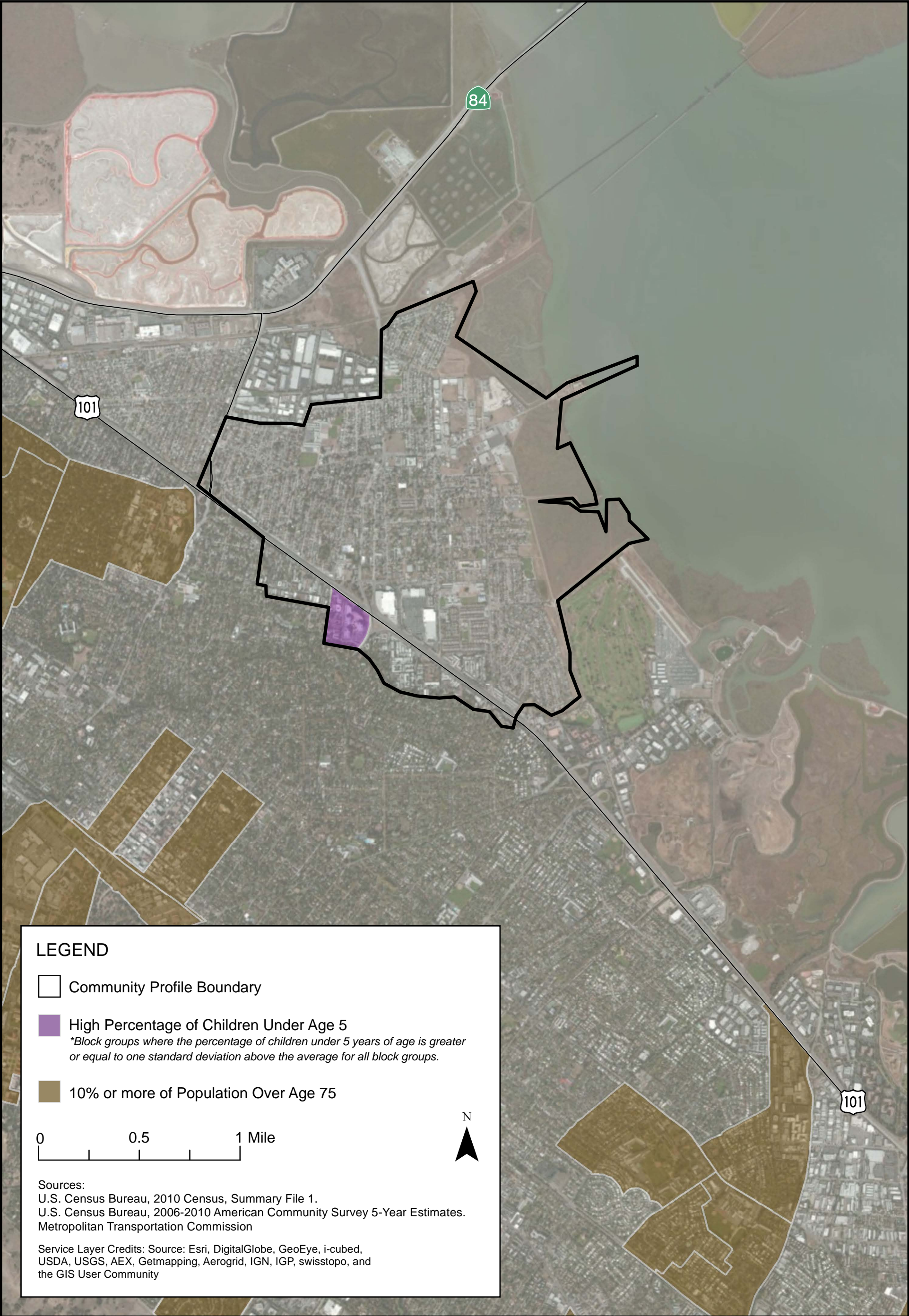
Sources:  
U.S. Census Bureau, 2010 Census, Summary File 1.  
U.S. Census Bureau, 2006-2010 American Community Survey 5-Year Estimates.  
Metropolitan Transportation Commission

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# BAY AREA HOUSING AND COMMUNITY MULTIPLE HAZARD RISK ASSESSMENT



**LEGEND**



Community Profile Boundary



High Percentage of Children Under Age 5  
*\*Block groups where the percentage of children under 5 years of age is greater or equal to one standard deviation above the average for all block groups.*



10% or more of Population Over Age 75

0 0.5 1 Mile

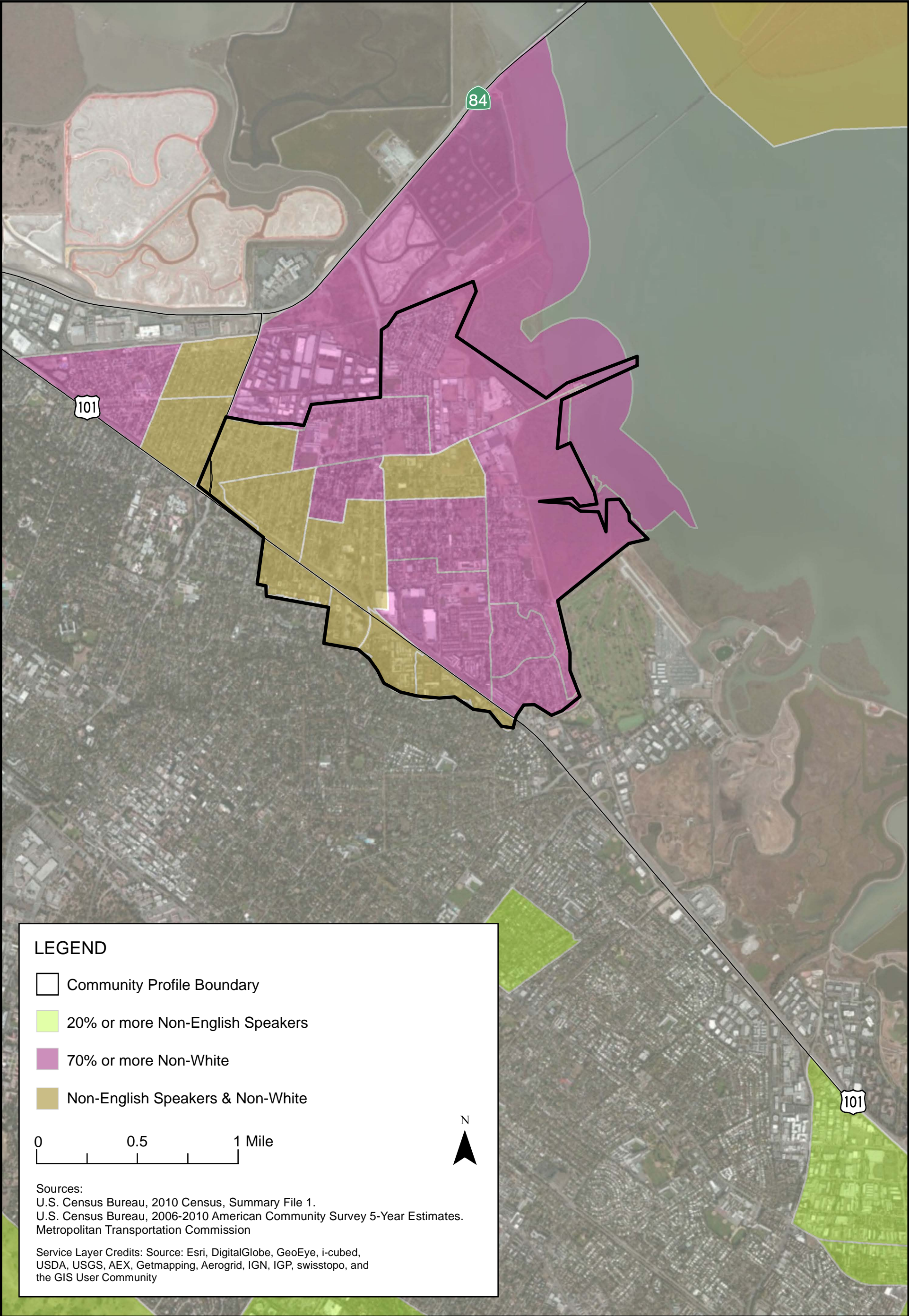


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# BAY AREA HOUSING AND COMMUNITY MULTIPLE HAZARD RISK ASSESSMENT



**LEGEND**

- Community Profile Boundary
- 20% or more Non-English Speakers
- 70% or more Non-White
- Non-English Speakers & Non-White

0 0.5 1 Mile

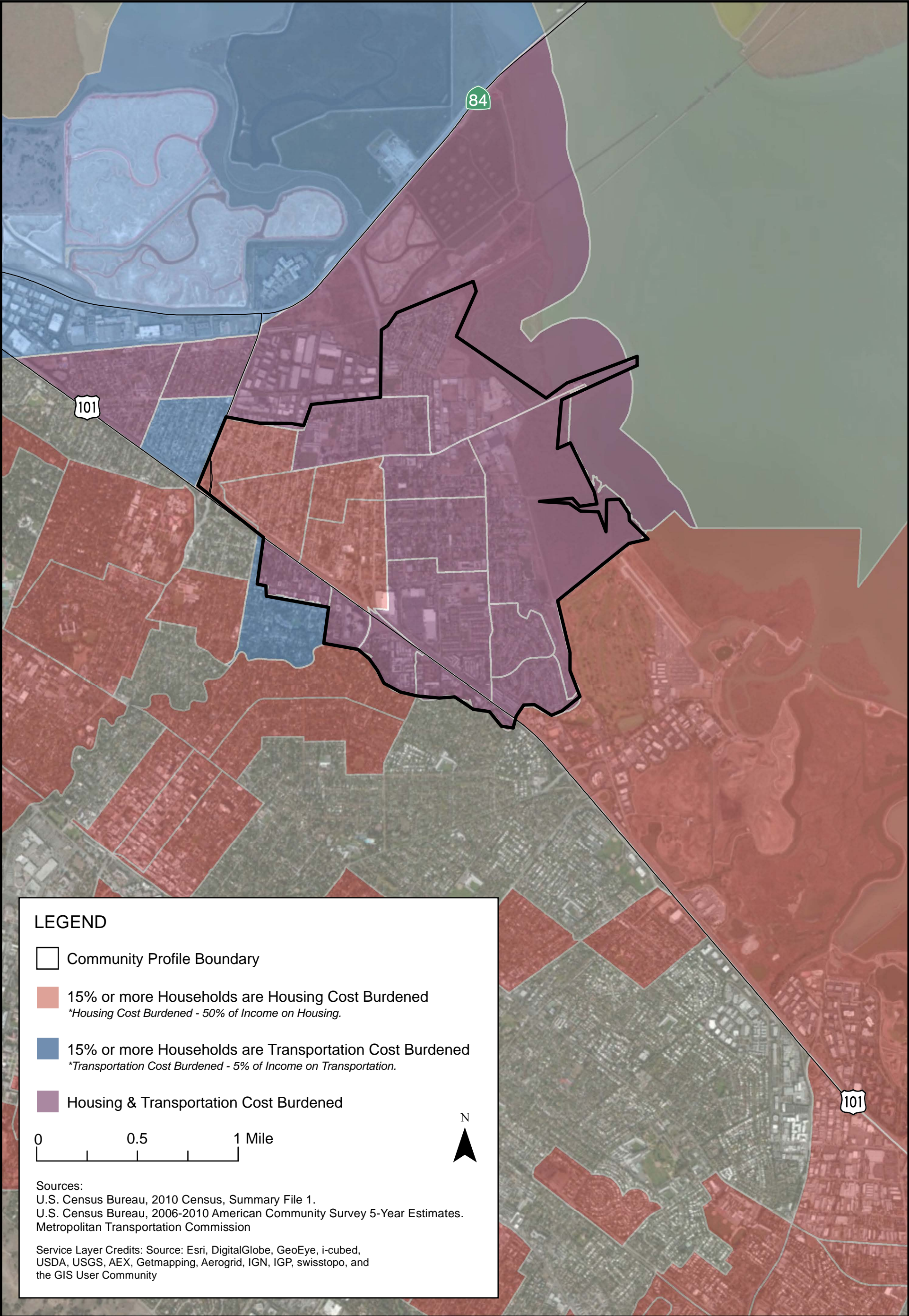


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# BAY AREA HOUSING AND COMMUNITY MULTIPLE HAZARD RISK ASSESSMENT



## LEGEND

- Community Profile Boundary
- 15% or more Households are Housing Cost Burdened  
*\*Housing Cost Burdened - 50% of Income on Housing.*
- 15% or more Households are Transportation Cost Burdened  
*\*Transportation Cost Burdened - 5% of Income on Transportation.*
- Housing & Transportation Cost Burdened

0 0.5 1 Mile

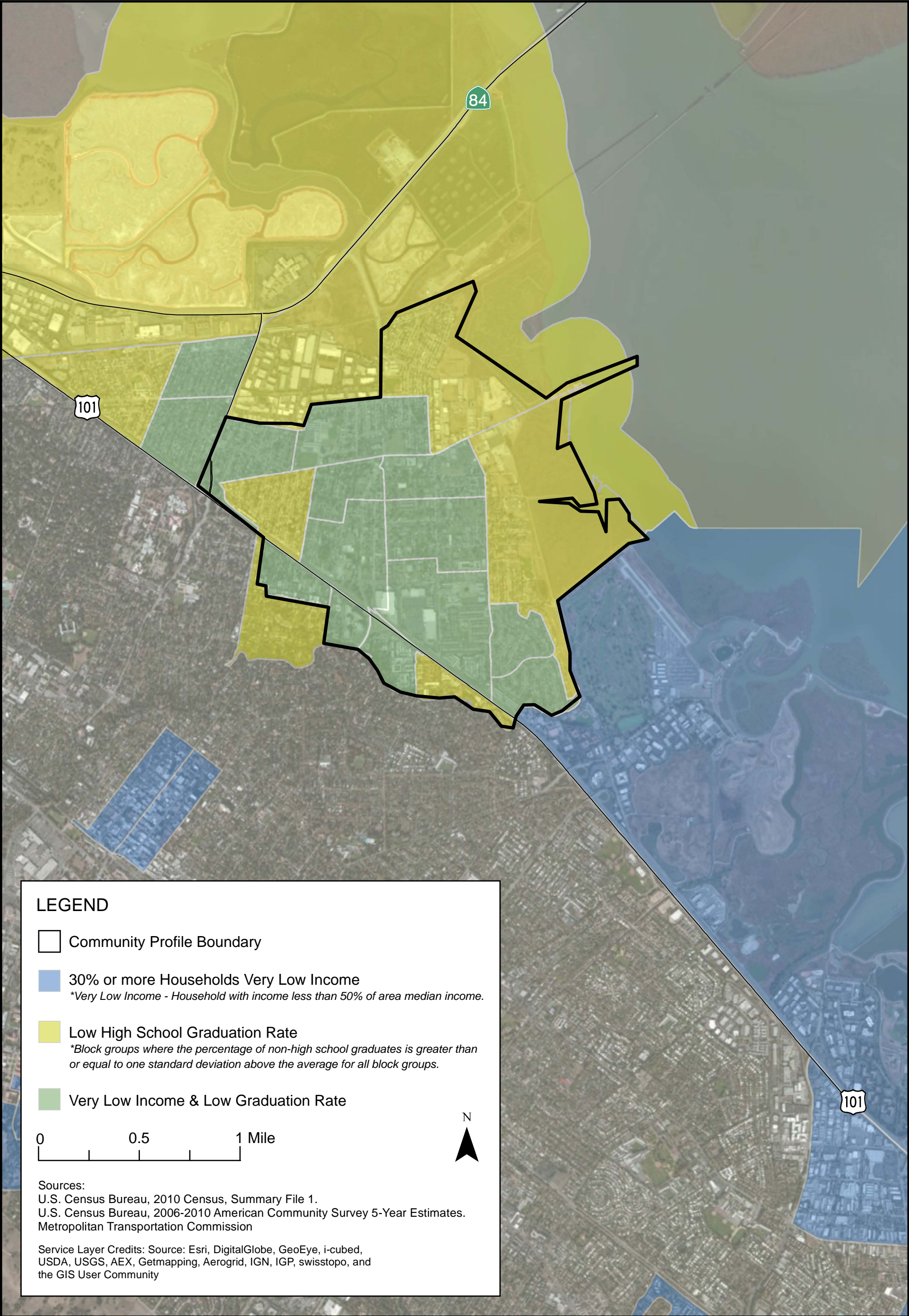


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# BAY AREA HOUSING AND COMMUNITY MULTIPLE HAZARD RISK ASSESSMENT



LEGEND

- Community Profile Boundary
- 30% or more Households Very Low Income  
*\*Very Low Income - Household with income less than 50% of area median income.*
- Low High School Graduation Rate  
*\*Block groups where the percentage of non-high school graduates is greater than or equal to one standard deviation above the average for all block groups.*
- Very Low Income & Low Graduation Rate

0 0.5 1 Mile

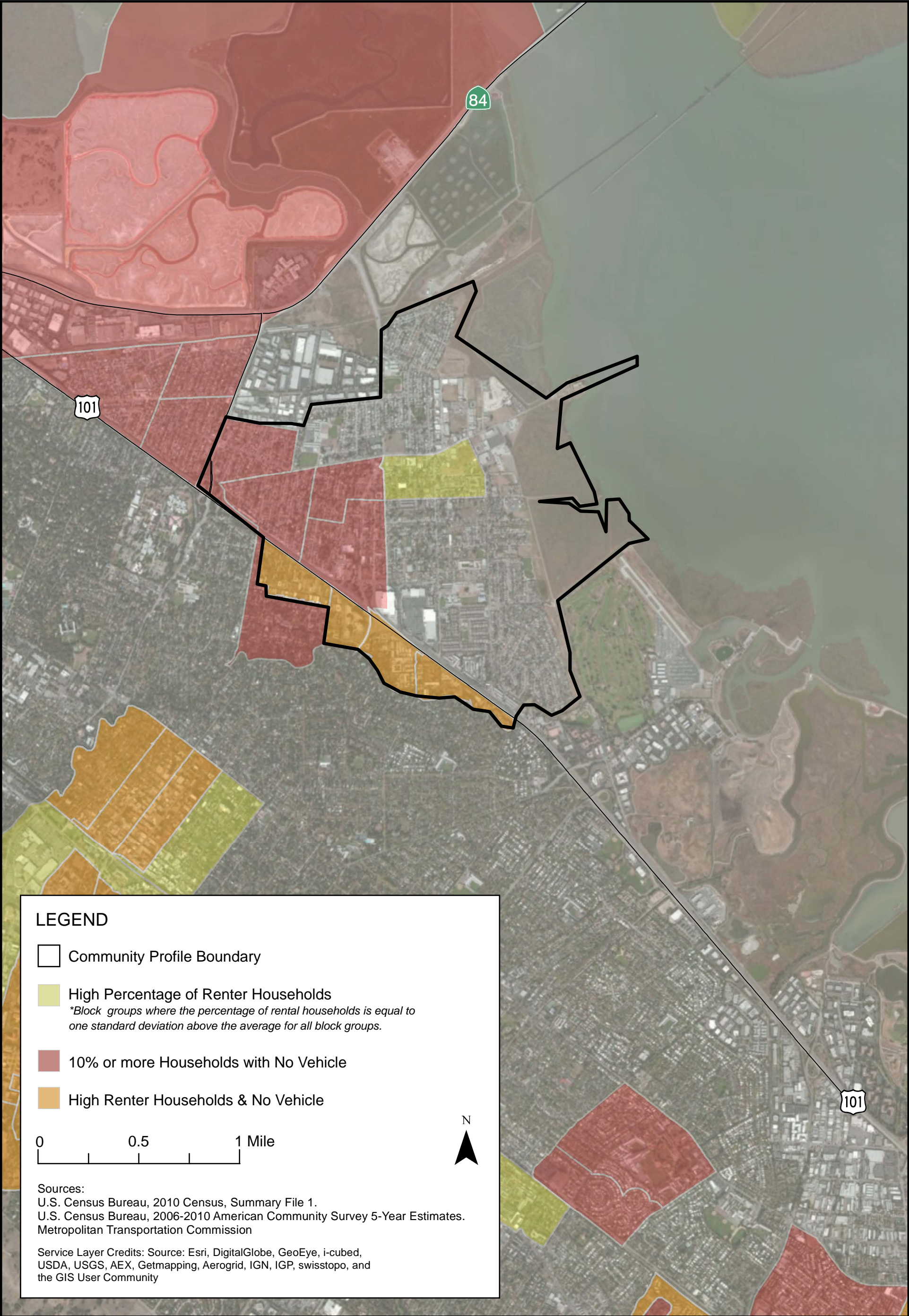


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# BAY AREA HOUSING AND COMMUNITY MULTIPLE HAZARD RISK ASSESSMENT



LEGEND

- Community Profile Boundary
- High Percentage of Renter Households  
*\*Block groups where the percentage of rental households is equal to one standard deviation above the average for all block groups.*
- 10% or more Households with No Vehicle
- High Renter Households & No Vehicle

0 0.5 1 Mile



Sources:  
U.S. Census Bureau, 2010 Census, Summary File 1.  
U.S. Census Bureau, 2006-2010 American Community Survey 5-Year Estimates.  
Metropolitan Transportation Commission

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